

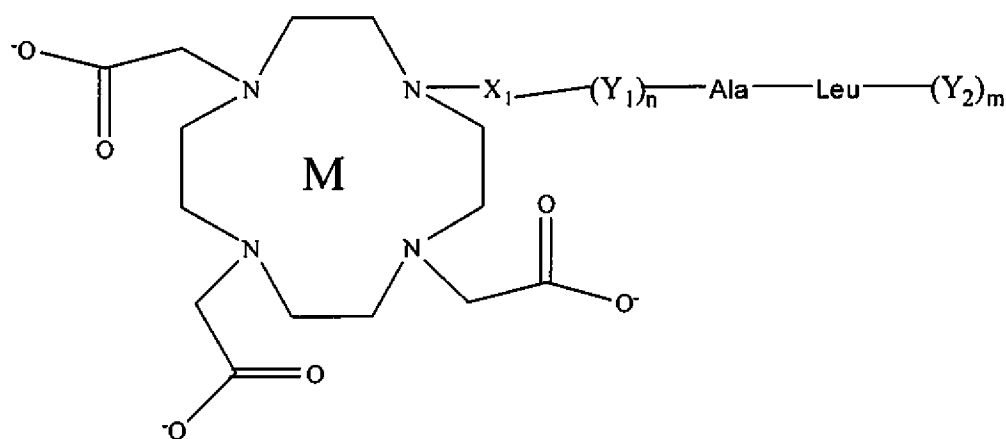
### AMENDMENTS TO THE CLAIMS

The following replaces all prior versions, and listing of claims, made in this application.

1-18 (Canceled)

19. (Currently Amended) A method comprising:

a) administering an MRI agent having the formula:



Y<sub>1</sub> and Y<sub>2</sub> are independently amino acid moieties;

n and m are each independently an integer from 0 to 5

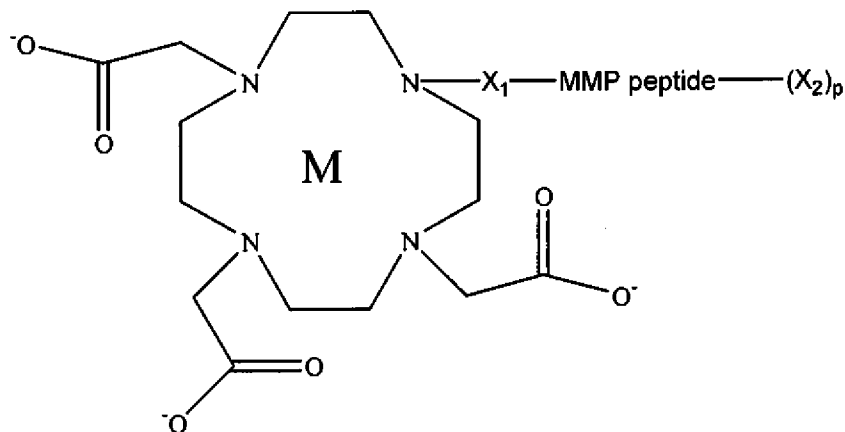
X<sub>1</sub> is an independent linker; and

salts thereof;

**b) producing a magnetic resonance image of a cell, tissue, or patient.**

20. (Currently Amended) A method comprising:

a) administering an activatable MRI agent having the formula:



wherein

$M$  is a paramagnetic metal ion selected from the group consisting of  $\text{Gd(III)}$ ,  $\text{Fe(III)}$ ,  $\text{Mn(II)}$ ,  $\text{Y(III)}$ ,  $\text{Cr(III)}$ ,  $\text{Eu(III)}$ , and  $\text{Dy(III)}$ ;

$X_1$  and  $X_2$  are each independent linkers;

$X_1$  is an aryl group or an alkyl group;

$X_2$  is an aryl group, an alkyl group, a carbohydrate group, a nucleic acid group, or a lipid group;

MMP is a matrix metalloproteinase (MMP) active peptide;

$p$  is an integer from 0 to 1; and

salts thereof;

b) contacting said MRI agent under conditions wherein said MMP active peptide **is cleaved by**  
~~interacts with~~ a MMP such that the  $T_1$  of the said MRI agent is decreased; and,

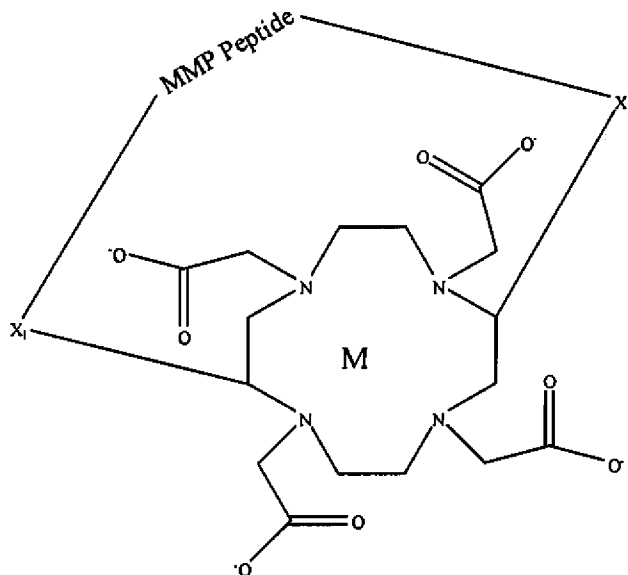
c) producing a magnetic resonance image of a cell, tissue, or patient.

21. (Previously Presented) A method according to claim 19, wherein said  $M$  is  $\text{Gd(III)}$ .

22. (Previously Presented) A method according to claim 20, wherein said  $M$  is  $\text{Gd(III)}$ .

23. (Previously Presented) A method according to claim 19, wherein  $X_1$  is selected from the group consisting of an aryl or alkyl group.

24. **(Canceled)** A method according to claim 20, wherein  $X_1$  is selected from the group consisting of an aryl or alkyl group.
25. **(Canceled)** A method according to claim 20, wherein  $X_2$  is selected from the group consisting of an aryl group, an alkyl group, a carbohydrate group, a nucleic acid group, a lipid group, and combinations thereof.
26. **(Previously Presented)** A method according to claim 19, wherein  $X_1$  is  $-(CH_2CO)-$ ,  $Y_1$  is  $-Pro-Met-$  when  $n = 2$ , and  $Y_2$  is  $-Trp-Met-Arg$  when  $m = 1$  (SEQ ID NO: 4).
27. **(Previously Presented)** A method according to claim 19, wherein  $X_1$  is  $-(CH_2CO)-$ ,  $Y_1$  is  $-Met-$  when  $n = 1$ , and  $Y_2$  is  $-Trp-Met-Arg$  when  $m = 3$  (SEQ ID NO:2).
28. **(Previously Presented)** A method according to claim 19, wherein  $X_1$  is  $-(CH_2CO)-$ ,  $n = 0$ , and  $Y_2$  is  $-Trp-Met-Arg$  when  $m = 3$  (SEQ ID NO:3).
29. **(Previously Presented)** A method according to claim 20, wherein said MMP is MMP 7.
30. **(Previously Presented)** A method according to claim 20, wherein  $X_1$  is  $-(CH_2CO)-$ , said MMP peptide comprises  $Leu-Met-Trp-Arg$ , and  $p = 0$  (SEQ ID NO:20).
31. **(Previously Presented)** A method comprising:
- a) administering an MRI agent having the formula:



wherein

M is a paramagnetic metal ion selected from the group consisting of Gd(III), Fe(III), Mn(II), Y(III), Cr(III), Eu(III), and Dy(III);

X<sub>1</sub> and X<sub>2</sub> are each independent linkers;

MMP is a matrix metalloproteinase (MMP) active peptide; and  
salts thereof;

2  
3 . b) contacting said MRI agent under conditions wherein said MMP active peptide interacts  
with a MMP such that the T<sub>1</sub> of the said MRI agent is decreased; and,

c) producing a magnetic resonance image of a cell, tissue, or patient.

33. (Previously Presented) A method according to claim 31, wherein said M is Gd(III).

1  
e (Previously Presented) A method according to claim 31, wherein X<sub>1</sub> and X<sub>2</sub> are independently  
s4 cted from the group consisting of p-aminobenzyl or substituted p-aminobenzyl.

3 .  
1 . (Previously Presented) A method according to claim 31, wherein said MMP peptide is Pro-Met-  
A a-Leu-Trp-Met-Arg (SEQ ID NO: 4).

35. (Previously Presented) A method according to claim 31, wherein said MMP is MMP 7.

36. (Previously Presented) A method according to claim 31, wherein said MRI agent has the formula:

